

# The Physician's BOOKSHELF



CALIFORNIA MEDICINE does not review all books sent to it by the publishers.  
A list of new books received is carried on page 48 of the Advertising Section.

**FATIGUE FRACTURES—A Clinical Study**—James M. Morris, M.D., Assistant Professor of Orthopaedic Surgery; Research Associate, Biomechanics Laboratory, University of California School of Medicine, San Francisco, Calif., and Loren D. Blickenstaff, M.D., Major, U.S. Army Medical Corps. Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Ill. (62703), 1967. 217 pages, \$15.50.

This clinical monograph calls attention to a relatively unexplored area of orthopedic interest and summarizes the authors' experience with seven hundred cases of fatigue fracture of the bones of the pelvis, leg and foot observed between 1963 and 1965 in military recruits at the Fort Ord Infantry Training Center. The material is divided into three introductory chapters covering general considerations and some interesting speculation on etiology, and seven chapters describing symptoms, signs and x-ray findings in lesions of the lower extremity. One hundred and forty-five pages or roughly two-thirds of the book are devoted to x-ray photographs, some of which, as the author notes, are of variable quality but which overall give to even the casual reader a wide exposure to the types of fracture encountered.

The authors stress the frequency with which the diagnosis may be missed because of lack of familiarity with the syndrome and urge that the diagnosis be made frequently by inference from clinical findings alone in the early stages when radiographs are often negative. The spontaneous resolution of stress fracture with only the simplest forms of supportive treatment is described but the authors take pains to except fatigue fracture of the femoral neck where delayed diagnosis can lead to disruption of the fragments, damage to blood supply and the catastrophe of non-union. Almost all patients were fresh recruits of previous sedentary occupation and ninety-nine percent were Caucasian. The clinical syndrome was encountered in almost all the bones of the pelvis and the lower extremity.

There is much to recommend this modest volume; the authors have presented what must be considered the definitive work on a clinical condition which is not generally encountered outside of military dispensaries, and have suggested that its occurrence in civilian life is often mis-diagnosed or missed entirely with occasional disastrous results. They are perhaps too enthusiastic in applying the condition too readily to the aches and pains of growing children and "shin splints" and strains of the adult, but appear to be correct in stressing its occurrence as a precursor to prolonged disability in fractures of the femoral neck where early recognition alone may prevent crippling.

The volume, whose bibliography contains two hundred and thirty-seven references covering one hundred years,

deserves to be included in all comprehensive orthopedic libraries, and may be considered essential in military medical installations.

EDWARD H. WILSON, M.D.

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**KINESIOLOGY AND APPLIED ANATOMY — The Science of Human Movement — 3rd Edition — Philip J. Rasch, Ph.D., F.A.C.S.M., Chief, Physiology Division, Naval Medical Field Research Laboratory, Camp Lejeune, North Carolina; and Roger K. Burke, Ph.D., F.A.C.S.M., Professor of Physical Education, Occidental College, Los Angeles, California.** Lea & Febiger, 600 S. Washington Square, Philadelphia, Pa. (19106), 1967. 488 pages, \$8.50.

In this third edition the authors have undertaken the formidable task of reviewing both classic findings and recent advances in the understanding of the basic functions of the human neuromusculoskeletal system. They have attempted to apply this information to physical or athletic training and to the treatment of certain musculoskeletal disorders.

The first part of the book is devoted to the composition, development, and function of the skeleton and its joints, the skeletal muscle system, and the nervous system. Recent basic research in these areas, includes studies in electron microscopy, cellular physiology, and electromyography, has been included. Two chapters are devoted to the nervous system; spinal reflexes, kinesthetic and servomotor control, conditioning reflexes, and motor learning are discussed.

A second section considers the human body as a machine and outlines the principles of mechanics and kinematics which apply to the musculoskeletal system. The concepts of dynamic mechanics, inertia, force, kinetics, lever systems, work, strength, and power are discussed as they apply to the musculoskeletal system.

The third part of the book is a moderately detailed review of movements of the major and minor joints of the upper and lower limbs and movements and stabilization of the spinal column and thorax. The anatomy and function of the musculature involved in these movements are presented in some detail. Implications for athletic training are included with the discussion of each joint or area in this section of the book.

In the final section, basic physiologic and structural aspects of the musculoskeletal system are considered as they apply to the kinesiology of posture, walking, running, and jumping. A separate chapter on the kinesiological principles in sports and games deals with such factors as application of kinesiology to warm-up, starting positions, terminal positions, strength, follow-through, stabilization, summation of forces, angular momentum, and falling.

A final chapter discusses kinesiology in the activities of daily living, such as lifting, moving weights, sitting and relaxing, kneeling, stair climbing, arrangement of working space, and avoidance of industrial fatigue.

Obviously, a single volume of 488 pages cannot cover completely such a vast subject as the basic physiology, anatomy, and kinesiology of the human musculoskeletal system, with therapeutic and practical applications. The authors, however, have expended a great deal of time and effort to bring together, in readable form, pertinent information, including references to the literature and numerous (234) illustrations which have been carefully chosen to document and emphasize the contents of the volume. An adequate index is available to those who may wish to pursue certain subjects in greater detail.

Although written primarily as a textbook, this volume is a valuable addition to the working libraries of those individuals engaged in physical therapy and the training of athletes. It is also an excellent review and reference manual for members of the medical profession who are engaged in the study and treatment of disorders of the musculoskeletal system.

It has been a pleasure to review this contribution to the medical literature.

JAMES M. MORRIS, M.D.

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**THE MADNESS IN SPORTS** — Arnold Beisser, M.D., Director, Center for Training in Community Psychiatry, Los Angeles, State Department of Mental Hygiene; and Clinical Professor, Psychiatry and Human Behavior, University of California, California College of Medicine. Appleton-Century-Crofts, Division of Meredith Publishing Company, 440 Park Avenue South, New York, N.Y. (10016), 1967. 241 pages, \$4.95.

The author clearly points up "the madness" in sports by recounting psychiatric case studies. He describes the complex and involved motivation behind successful athletes, and enumerates some of the social pressures of our society which assist in producing such compelling drives in the youngsters. The material is new, stimulating and thought provoking for all physicians, not only those concerned with the psychological and physical problems of athletes.

The author's summation of our undue preoccupation with sports and masculinity, I think, is valid, and his criticism should be heeded. Each reader shall judge for himself the Freudian relationship to competitive sporting events. Could not hereditary traits in man account for a competitive drive similar to that exhibited by all young animals whose play frequently leads to training for subsequent competition and survival?

CHARLES G. HUTTER, M.D.

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**HUMAN TRANSPLANTATION** — Edited by Felix T. Rapaport, M.D., Associate Professor of Surgery; Head, Transplantation and Immunology Division, Department of Surgery; New York University Medical Center; Director of Research, Institute of Reconstructive Plastic Surgery, New York University Medical Center; Visiting Surgeon, Bellevue Hospital, New York, N.Y.; and Jean Dausset, M.D., Prof. Ag., Faculté de Médecine, Université de Paris; Directeur d'Immunohématologie, Centre Georges Hayem, Paris; Institut de Recherches de la Faculté de Médecine, Université de Paris; Biologiste des Hôpitaux de la Ville de Paris. Grune & Stratton, Inc., 381 Park Avenue South, New York, N.Y. (10016), 1968. 728 pages, \$38.50.

This is a beautifully illustrated compendium of present experience in organ transplantation. There is some discussion of the genetic basis for and against homotransplantation of organs, and there is the proper amount of space given to considerations of moral and ethical problems. Experts in the transplantation of almost every organ system have written clearly and succinctly in their own areas of interests. Like all books relating to the fast

developing field of organ transplantation, it is already outdated by recent contributions, particularly in the area of heart transplantation. I believe it is an excellent book for reference and library use, but the individual physician will probably gain more information from the current medical literature.

NORMAN E. SHUMWAY, M.D.

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**INFECTIOUS DISEASES OF CHILDREN**—Fourth Edition—Saul Krugman, M.D., Professor and Chairman, Department of Pediatrics, New York University School of Medicine, New York, N.Y.; Director of Pediatrics, Bellevue Hospital Center, New York, N.Y.; Director of Pediatrics, University Hospital, New York, N.Y.; and Robert Ward, M.D., Professor and Chairman, Department of Pediatrics, University of Southern California School of Medicine, Los Angeles, Calif.; Physician-in-Chief, Childrens Hospital, Los Angeles, Calif. The C. V. Mosby Company, 3207 Washington Boulevard, St. Louis, Mo. (63103), 1968. 428 pages, \$16.50.

This book can be read only with wistful wonder that the authors have compressed such an amazing amount of authoritative material into a succinct volume. Three previous editions are updated and considerably improved upon. Almost every detail regarding both common and less common infectious diseases which the clinician may encounter has been covered in a most admirable manner: etiology, immunology, clinical manifestations, prevention and treatment.

There is an adequate bibliography which extends well into 1968, practically up to yesterday or the day before. Even more to the point are the authors' comments on the validity and importance of the literature and they have not hesitated to express their own opinions on many disputatious matters. One might disagree with a very few statements—but only at his own peril. There are numerous capsule case histories which illustrate and enliven the general discussion.

This book is sufficiently compact to be a source of ready reference but it is sufficiently authoritative and detailed that one will rarely need to go further for information. Anyone with a special interest in the subject matter will find it hard to avoid reading this book from cover to cover.

EDWARD B. SHAW, M.D.

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**DIAGNOSTIC LABORATORY HEMATOLOGY** — Fourth Edition, Revised and Enlarged—George E. Cartwright, M.D., Professor of Medicine, College of Medicine, University of Utah, Salt Lake City, Utah. Grune & Stratton, Inc., 381 Park Avenue South, New York, N.Y. (10016), 1968. 441 pages, \$10.00.

This is the outstanding manual for techniques employed in routine clinical hematology laboratories. The author has selected preferred methods rather than presenting many possible alternatives. This edition follows the previous one by five years, and has been extensively rewritten to encompass the major new developments in this rapidly growing field.

It is difficult to find fault with the author's choice of methods or clarity of exposition. It is unfortunate, however, that the section on red cell antibodies in acquired hemolytic anemia is largely adapted from publications of Dacie, and techniques thus follow those generally used in England. For example, the directions for the antiglobulin test are not appropriate for the antiglobulin reagents generally available in this country.

Nonetheless this small volume receives our highest recommendation. It is suitable for physicians and for technologists. A copy belongs in every hematology laboratory and library.

HERBERT A. PERKINS, M.D.